REMARKS

This responds to the Office Action dated March 25, 2005.

Claims 1, 5, 10, and 19 are amended, no claims are canceled, and no claims are added; as a result, claims 1-20 are now pending in this application. The amendments to the claims are fully supported by the specification as originally filed. No new matter is introduced. Applicant respectfully requests reconsideration of the above-identified application in view of the amendments above and the remarks that follow.

Claim 1 is amended to clarify claim 1. Claims 5, 10, and 19 are amended to correct a typographical error.

§112 Rejection of the Claims

Claims 1-5, 8, 14 and 18 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant traverses these grounds of rejection of these claims.

Applicant submits that rejections to claims 1-5 are moot in light of the amendment to claim 1.

In the Office Action, it is stated that "[t]he term 'about 1.2 kilohertz' is not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention." No basis or further explanation in provided in the section of the Office Action regarding 35 U.S.C. § 112. Applicant respectfully traverses the assertion and submits one skilled in the art on studying the specification and claims would understand the meaning of "about" in the claims. Notwithstanding the traversal, Applicant has amended claim 1 to remove "at about 1.2 kilohertz" in claim 1. Thus, the Section 112 rejection of claim 1 is believed moot.

Claim 8, in part, recites "a frequency of peak gain of the hearing aid at about 1.2 kilohertz." Applicant submits that the term "about 1.2 kilohertz" is defined in claim 8 as a frequency at which peak gain of the hearing aid of claim 8 occurs. The term "about" is not indefinite *per se*. See M.P.E.P. 2173,05(b)A. Further, Figure 3 of the instant application shows a peak 24 of curve 22 at about 1.2 kilohertz. Applicant submits that at least page 8, lines 6-11

and Figure 3 provides sufficient information for one skilled in the art to ascertain the degree of the term "about," which is clear but flexible. See, MPEP 2173.05(b) A.

For at least reasons similar to those discussed above with respect to claim 8, Applicant submits that the term "about 1.2 kilohertz" in claims 14 and 18 is not indefinite.

Applicant respectfully requests withdrawal of these rejections of claims 1-5, 8, and 14, and reconsideration and allowance of these claims.

First §103 Rejection of the Claims

Claims 1, 2, 6-8 and 11-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Martin et al. (U.S. Patent No. 5,710,820) in view of Sogn et al. (U.S. Patent No. 5,243,662), Smriga ("Exploring the Versatility of Three-Channel Programmability"), Trump and Stitt ("MFB Low-Pass Filter Design Program", Burr-Brown Application Bulletin AB-034B), Lacanette ("A Basic Introduction to Filters-Active, Passive, and Switched-Capacitor", National Semiconductor Application Note 779), Gennum Technical Paper: "Active Filtering for Hearing Aids" ("Reference VV" hereinafter), and Trofimenkoff et al. ("Noise Performance of RC-Active Quadratic Filter Sections"). Applicant traverses these grounds of rejection of these claims.

Applicant respectfully submits that the references Martin et al. (hereafter Martin) in view of Sogn et al. (hereafter Sogn), Smriga, Trump and Stitt, Lacanette, Gennum Technical Paper: "Active Filtering for Hearing Aids" ("Reference VV" hereinafter), and Trofimenkoff et al. (hereafter Trofimenkoff) do not establish a proper *prima facie* case of obviousness with respect to the claims of the instant application for several reasons.

Applicant cannot find a teaching or a suggestion in the combination of Martin, Sogn, Trump and Stitt, Lacanette, Reference VV, and Trofimenkoff of all the elements as recited in the independent claims. For instance, Applicant cannot find a teaching or a suggestion in the combination of Martin, Sogn, Trump and Stitt, Lacanette, Reference VV, and Trofimenkoff of an electronic device for use in assisting a hearing impaired patient including a variable resistor to couple a low pass filter to an input of an operational amplifier as recited in claim 1. In the Office Action it is stated that "[a]ny resistor in a circuit is 'variable', as broadly as claimed and disclosed, in that its value may be varied [e.g. at the design of manufacturing] to achieve different desired results." Applicant disagrees. Claim 1 recites "a variable resistor" where "a

variable" describes the resistor as "a" resistor that is "variable." Further, Applicant submits that the term "a variable resistor" is understood by one skilled in the art as "a" resistor that is "variable."

In the Office Action it is stated that "the courts have held that making something adjustable by employing known means, where there is art-recognized need for adjustability, is not a patentable advance (see MPEP 2144.04[V][D.], In re Stevens, 212 F.2d 197, 101 USPQ 284 [CCPA 1954])." MPEP 2144.04 V.D. recites

> *In re Stevens*, 212 F.2d 197, 101 USPQ 284 (CCPA 1954) (Claims were directed to a handle for a fishing rod wherein the handle has a longitudinally adjustable finger hook, and the hand grip of the handle connects with the body portion by means of a universal joint. The court held that adjustability, where needed, is not a patentable advance, and because there was an art-recognized need for adjustment in a fishing rod, the substitution of a universal joint for the single pivot of the prior art would have been obvious.).

Applicant submits that the features of the instant subject matter as recited in the claims are distinguished from *In re Stevens*. The section of referenced in the Office Action asserted that adjustablity could be provided by a universal connection, where use of the universal connection in such joints was common in the prior art. The universal connection could be substituted for a single pivot connection and adjustability of a finger grip was asserted to be suggested by a prior art reference, the combination of which was used to determine patentability in *In re Stevens*. Applicant respectfully traverses these assertions and submits that in contrast to *In re Stevens*, a variable resistor as arranged in claim 1 is not merely a substitution of a known part for another known part of an electronic device for use in assisting a hearing impaired patient. The varible resistor is interrelated without other features of claim 1 in an electronic device for use in assisting a hearing impaired patient to provide adjustablity of a frequency. Further, Applicant submits that no objective evidence or cited reference has been given in the Office Action that provides a teaching or a suggestion that a variable resistor as interconnected with the features of claim 1 would be obvious in the manner of *In re Stevens*. For instance, in the Office Action it is stated that "[i]t was notoriously well known in the art at the time the present invention was made to provide adjustabiliy in electronic circuits by substituting potentiometers for fixed-value resistors in a general design." Applicant notes that the court in *In re Stevens* cited a prior art reference with respect to the adjustable finger grip, which is a specific part of a fishing rod, and did not

make a general reference to a broad range of devices. In the Office Action, as noted in the above quote, a specific reference with respect to the claimed device thas not been provided. See *In re Sang Su Lee*, 277 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002) regarding the need for the Office Action to provide specific, objective evidence. Thus, Applicant submits that *In re Stevens* as applied in the Office Action is not applicable to the instant claims.

Further, Applicant submits that the analysis in the Office Action to arrive at conclusion that a resistor R_3 from the Trump and Stitt refererence may be selected to provide a desired frequency does not disclose or suggest a variable resistor in the device as recited in claim 1. It is noted that "[a]ny judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure, such a reconstruction is proper." *In re McLaughlin* 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971). The rejection has combined the references to show a circuit having an operational amplifier to provide a filter, though the combined references do not teach or suggest all the elements of claim 1. The rejection asserts that selection of a particular resistance value for a resistor in a circuit from reference Trump and Stitt results in a particular frequency response that will be different with different resistances selected. However, to make a conclusion that a variable resistor as interconnected in claim 1 is obvious, the rejection has made a reconstruction of features missing from the cited references based on the material only provided in Applicant's disclosure to reconstruct the features as interrelated in claim 1. Therefore, Applicant submits that the analysis provided in the Office Action is improper with respect to combining with the cited references to establish a *prima facie* case of obvious with respect to claim 1. Thus, Applicant submits that Martin in view of Sogn, Smriga, Trump and Stitt, Lacanette, Reference VV, and Trofimenkoff do not teach or suggest all the elements of claim 1.

The rejection states "[t]he analysis above is based on the application of basic engineering principles to a problem that is well defined in the prior art, and does not require the exercise of an inventive process." Applicant submits that the above quote is not supported by reference to 35 USC or case law and that the above quote is an improper basis for determining patentability. Applicant requests that the Examiner provide an authoritative source that defines the exercise of

an inventive process and further defines that the exercise of an inventive process does not include application of basic engineering principles. Applicant submits that use of basic engineering principles does not negate patentability. Furthermore, Applicants submits that an inventive apparatus and method may apply basic engineering principles to a problem well defined in the prior art. The issue is whether the invention as a whole is novel and non-obvious. In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983); *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985); MPEP § 2141.02. Since the cited references do not teach or suggest all the elements as recited in claim 1 and analysis of the claims in the Office Action was based on the material in Applicant's disclosure and the claims to provide features missing in the combination of cited references, Applicant submits the analysis of the claims, for instance claim 1, in the Office Action has considered the differences in the prior art and claim 1 and has not considered claim 1 as a whole. Thus, citing Martin in view of Sogn, Smriga, Trump and Stitt, Lacanette, Reference VV, and Trofimenkoff does teach or suggest claim 1.

For at least the reasons stated above, Applicant submits that claim 1 is patentable over the cited referernces (Martin in view of Sogn, Smriga, Trump and Stitt, Lacanette, Reference VV, and Trofimenkoff). For at least reasons similar to those stated above with respect to claim 1, Applicant submits that independent claims 6, 11, and 16 are patentable over the cited references. Claim 2, claim 7-8, claims 12-15, and claims 17-18 are dependent on claims 1, 6, 11, and 16, respectively, and are patentable over the combination of Martin, Sogn, Trump and Stitt, Lacanette, Reference VV, and Trofimenkoff for at least the reasons stated above.

Applicant respectfully requests withdrawal of these rejections of claims 1, 2, 6-8 and 11-18, and reconsideration and allowance of these claims.

Second §103 Rejection of the Claims

Claims 3-5, 9, 10, 19 and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Martin et al. (U.S. Patent No. 5,710,820) in view of Sogn et al. (U.S. Patent

No. 5,243,662), Smriga ("Exploring the Versatility of Three-Channel Programmability"), Trump and Stitt ("MFB Low-Pass Filter Design Program", Burr-Brown Application Bulletin AB-034B), Lacanette ("A Basic Introduction to Filters-Active, Passive, and Switched-Capacitor", National Semiconductor Application Note 779), Gennum Technical Paper: "Active Filtering for Hearing Aids" ("Reference VV" hereinafter), and Trofimenkoff et al. ("Noise Performance of RC-Active Quadratic Filter Sections") as applied to claims 3 and 4 above, and further in view of Gennum Application Note: "How to Use the LS509 based GS3010 Hybrid ("Reference UU" hereinafter) and Gennum Application Note: "GL504-GH580, GK504-GH580" ("Reference XX" hereinafter). Applicant traverses these grounds of rejection of these claims.

Claims 3-5, claims 9 and 10, and claims 19 and 20 are dependent on independent claims 1, 6, and 16, respectively, and are patentable over Martin in view of Sogn, Smriga, Trump and Stitt, Lacanette Reference VV, and Trofimenkoff and further in view of Reference UU and Reference XX for at least the reasons stated above with respect to claims 1, 6, and 16.

Applicant respectfully requests withdrawal of these rejections of claims 3-5, 9, 10, 19 and 20, and reconsideration and allowance of these claims.

Assertion of Pertinence

Applicant has not responded to the assertion of pertinence stated for the references cited, but not relied upon, by the Office Action since these references are not relied upon as part of the rejections in this Office Action. Applicant is expressly not conceding they have any pertinence and reserves the right to respond more fully should any of them form a part of some future rejection.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 371-2157 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date 25 July 2005 By _____
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CERTIFICATE UNDER 37 CFR § 1.8: The undersigned hereby certifies that this correspondence is being transmitted via facsimile to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 25 day of July 2005.

KATE GANNON
Name

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Signature